

# RECORDS OF THE PAST

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## SITE OF ANCIENT PERSEPOLIS

**P**ERSEPOLIS is the name identified with the group of ruined palaces which cuneiform inscriptions have located as the site of the ancient royal palace of Darius, the pillared halls of Xerxes (the king Ahasuerus of the Bible) and the throne room of Artaxerxes, who each in turn succeeded Cyrus, the Great King of the Medes and Persians.

Here is a field for thorough research by the practical archaeologist that is as yet almost unexplored, notwithstanding the many illustrations, descriptions and perfunctory examinations made often by those imbued with the true archaeological instinct, who have visited the locality, even those as early as 1676 being profusely illustrated with etchings and copper-plate engravings. In the study, however, of the ruins of these stately palaces, whose splendor and magnificence have thus been the theme of the theorist for more than 200 years, they have been viewed almost entirely with reference to their ethnical influence in the evolution and development of architectural and artistic conceptions. The scientific archaeologist with the pick and shovel has not as yet been permitted to any great extent to read the record that lies buried beneath the surface.

Mr. Herbert Weld Blundell, who superintended an expedition from England to the spot in 1891, with the purpose of taking molds of the more prominent sculptures, says: "There are few famous sites that have been more the subject of examination and debate, and yet have

preserved so successfully the secrets of their subterranean features as the great group of palaces known as Persepolis. Any addition, therefore, to the knowledge we possess, obtained by ever so modest a scratching of the soil, will be welcomed by archaeologists, who have had to depend so long on calculation and conjecture. Every link, however small, may be of importance in the chain of evidence, and, in default of which, ingenious conjectures backed with authority may become, for want of contradiction, accepted as facts with the result that research is directed into wrong channels and the progress of absolute knowledge delayed."

Persepolis is in the interior of Persia, a little more than 200 miles northeast of Bushire on the coast of the Persian Gulf. Of the many expeditions undertaken to this place, from the standpoint of scientific observation, the one by Mr. Blundell and that by Prof. A. V. Williams Jackson, in 1903, have not been the least in importance. To the work of this latter the reader is referred for a more extended account than can be given in these pages. The work of Lord Curzon, *Persia and the Persian Question* must also be referred to.

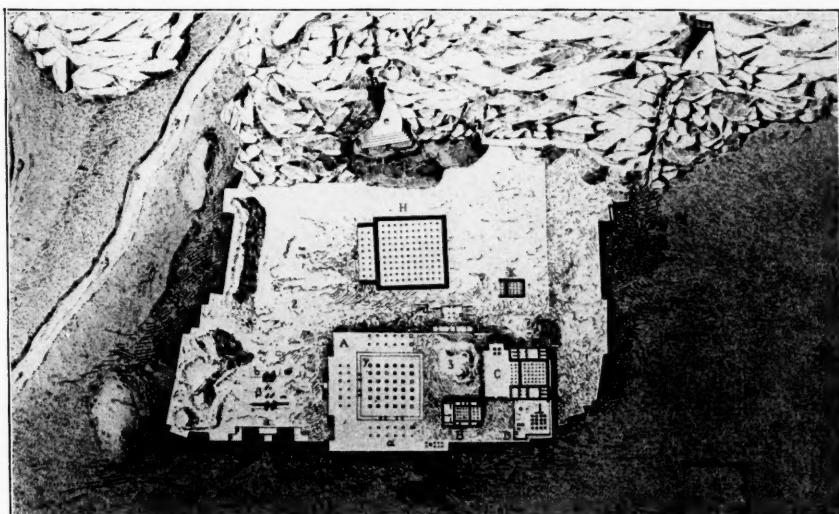
The magnificent terrace or platform upon which are these majestic ruins, is the foundation upon which stood the palaces of those who have borne the title "King of Kings"—Darius, Xerxes, Artaxerxes, and their successors.

Here also Alexander the Great held revel in the deserted halls of his adversary Darius Codomannus, the last of the Achæmenian kings, and in his drunken revelry, as is believed, burned the lordly edifice and the royal library. The configuration of this terrace-height is such that three distinct levels are yet clearly noticeable. The central terrace is 45 ft. in height; that portion forming the south part is 20 ft. in height while the north part is 30 ft. in height. The outline of this elevation is very irregular, a condition which is due no doubt to the original contour of the rocky spur upon which it is built. The area covered is about 900 by 1,600 ft. Over the surface of this platform were spread the architectural glories of the Achæmenians, the original plan and main construction of which had been compared with Baalbec and Palmyra. That Darius was the founder, he himself definitely states in one of his inscriptions that he "built the fortress on a place where no fortress had been built before."

The means of access to this terrace or platform, which must have remained unchanged since the time of Xerxes, is by a great double staircase, the first flight in each comprising 58 steps to a broad landing and the second height 48 steps, with an ascent so gentle and width so broad that a troop of horsemen could ride up abreast.

Near the upper landing of the double staircase to this elevated platform at this point are the colossal winged bulls of stone guarding the "Portals of all Nations," and near the top of whose massive pylons there is a tri-lingual inscription in cuneiform characters stating that the portal is the work of Xerxes.

Two of the original four fluted columns are still standing between the stately piers of this triumphal arch, through which the envoys marched in dignified procession, bearing tribute to the "King of Kings," who received their homage in the great tapestry-hung Hall of Xerxes beyond. Here the coronations and the gorgeous state ceremonials took place, the reception of embassies when the king was seen in solemn state upon his throne, surrounded by his courtiers or taking part in magnificent banquets and amusements as is shown in the sculptures round about. The ruin and desolation since the destruction by Alexander the Great forms a pathetic contrast to the proud vaunt of the king expressed in the cuneiform tablet carved on the stairway of ap-



PLAN OF PERSEPOLIS

*a*—Grand Stairway. *b*—Portal of All Nations. *A*—Hall of Xerxes. *B*—Palace of Darius. *C*—Palace of Xerxes. *D*—Palace of Artaxerxes. *H*—Hall of a Hundred Columns.

proach, "I am Xerxes, the Great King, the King of Kings, King of the Nations with their many peoples, King of this great Earth even to afar," and a sadder comment on the pious fervor of the words that follow, "thus saith Xerxes the Great King: Everything that has been made by me here and all that has been made for me elsewhere, I have made by the grace of Auramazda: may Auramazda with the other divinities protect both my Kingdom and all that I have made."

Ferdinand Justi, in his *Empire of the Persians* (1878), says: "On the southern side Darius had inserted in the wall a colossal block containing a record of the work. It was engraved with a twofold inscription in Old Persian, one in Sasanian (Seythian) and the other Babylonian (Assyrian). At variance with the usual custom, the two last inscriptions are only in part versions of the Old Persian. The first Per-

sian inscription runs as follows: "*The great Auramazda, who is the greatest of the gods, established Darius as King, he has bestowed on him the Kingdom; by the grace of Auramazda is Darius become King.* Says Darius the King, the land Parsa which Auramazda has granted me which is illustrious abounding in good horses and in men, has no fear of any enemy by the grace of Auramazda and of me the King Darius. Saith Darius the King, may Auramazda and the gods of my house be my stay and may Auramazda protect this land from hostile armies, famine, and falsehood. May no enemy come into this land, no hostile armies, no famine, and may no falsehood prevail. This grace do I ask of Auramazda and the clan gods, may Auramazda and the clan gods grant me this prayer."

The second Persian inscription begins: "*I am Darius the Great King, the King of Kings, the King of these many lands, the son of Hystaspes the Achaemenian,*" then the countries are enumerated and the inscription ends thus: "Says Darius the King: 'If thou, Auramazda, sayest be it so, then shall I tremble in the presence of no enemy. Protect this nation Parsa, for if the nation of Parsa have thy protection, then will Fortune, who has ever brought the hater to nought, descend as mistress into this house.'"

The Sasanian (Seythian) inscription translates the introduction of the second Persian inscription and continues: "Darius the King says: '*Upon this spot is this castle established; hitherto no castle was here established. By the grace of Auramazda have I established this castle and Auramazda and the other gods prompted in me the desire that this castle should be established and I have established it enduringly in all the beauty and perfection that was my pleasure.*' Darius the King saith: '*May Auramazda and all the gods protect me and this castle and that which is within this castle. May I never see the wish of an evil man fulfilled.*'"

The Babylonian (Assyrian) inscription contains a paraphrase of the two in Persian.

In one of the doorways of the Great Hall of a Hundred Columns—the largest of these Persepolitan structures—is a bas-relief depicting the combat of the king with a strange monster which he slays in the most unconcerned manner. In another doorway is a bas-relief of majestic conception, portraying the king seated upon his throne receiving the homage of his vassals.

By far the most interesting question with reference to these buildings is their period of occupancy and their destruction by Alexander the Great, evidence of which must lie buried beneath the surface.

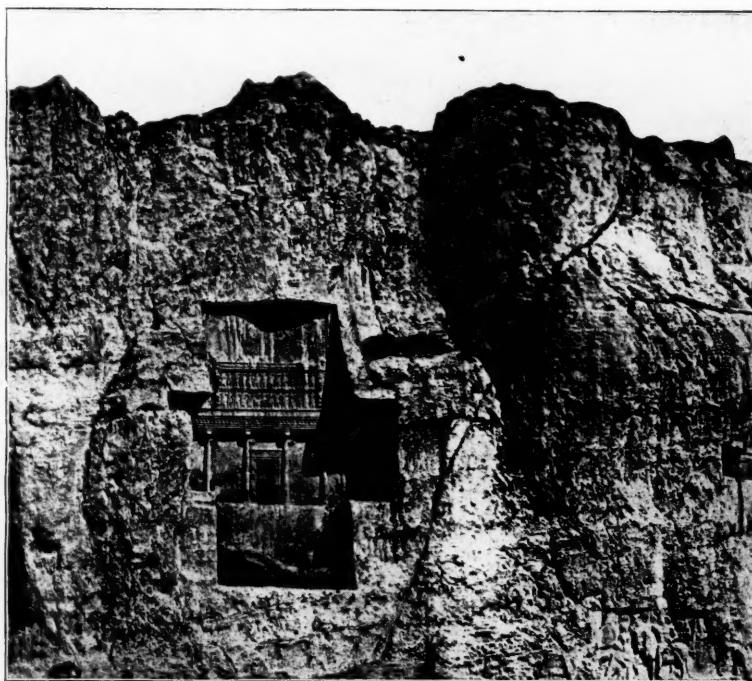
The rock-cut tombs, called Naksh-i Rustam, of these Achæmenian Kings lie 5 or 6 miles north of this great platform site where once stood their palaces. This rocky cliff, in which the sepulcher of Darius and those of his son, grandson and great-grandson are carved, resembles a ragged wall of solid rock over 500 ft. long and between 100 and



BAS-RELIEFS, HALL OF A HUNDRED COLUMNS

200 ft. high. The 4 tombs hewn in the bosom of the rock are practically all of the same size and dimensions and absolutely uniform in their exterior design.

The shape of each façade is roughly that of a Greek cross some 70 ft. high and 60 ft. wide hewn deep into the stone. In the middle of each façade a door with decorative lintel is cut, but only the lower half is pierced so as to furnish but a small aperture. Two columns cut in high relief stand on either side of the doorway. They are capped with the heads of bulls after the characteristic manner of the Persepolitan architecture and they support an entablature with ornamental architrave, frieze and cornice forming a base for the elaborately sculptured



ONE OF THE 4 TOMBS OF THE ACHÆMENIAN KINGS  
PROBABLY THAT OF XERXES

panel that fills the upper limb of the cross. Here, carved in two rows, one above the other, are bas-reliefs representing the vassal nations as supporting the staging upon which stands the king worshiping before the altar with its sacred fire. By comparing the national garb, the characteristic features and the position of the figures with the names enumerated in the adjoining inscription, we may identify to-day almost every one of the nations represented on the bas-relief. The entrance to the sepulcher is so high from the ground that it is impossible to reach it except by the aid of ropes or ladders.

The tomb of Darius is the only one of the 4 whose identity is positively known. This identification is made certain by means of the two tri-lingual inscriptions, carved near the figure of the king and around the doorway. In some 60 lines the king glorifies Auramazda, enumerates the nations that acknowledge his sway, and exhorts the people not to depart from the "Way which is Right."

The other tombs apparently belong to Xerxes, Artaxerxes, and Darius II, but in the absence of inscriptions we can only surmise how they were occupied respectively.

The monuments of Persepolis suggest that the homage of fire as divine was also an element of the ancient Persian religion.

Near by these rock-cut tombs are two "Fire Altars" carved out of the living stone upon which fancy will easily portray the Magian priest heaping high the incense and the sandalwood upon the sacred flame on some solemn occasion when the Great King, ever mindful of death in the midst of earthly pomp and splendor, came to offer sacrifice at the royal tombs.

THOMAS FORSYTHE NELSON.

Washington, D. C.



### PRESERVING WISCONSIN MOUNDS

**D**R. GEORGE L. COLLIE, president of Beloit College, has described Wisconsin as one of the great world-centers of aboriginal life and industry.

The description must be accepted as essentially true because Wisconsin possessed, at the opening of the XIX century, more prehistoric earthworks than any other state in the Union, or any other known locality of equal area in the world. They existed not by scores or hundreds, but literally by thousands, and embraced a greater number of effigy, or symbolic, or ceremonial or "picture" mounds (such as turtles, lizards, birds, fish, reptiles, men and quadrupeds) than have been found in all the rest of the land combined.

The large number and frequently great size of these earthworks suggests that the so-called Mound-builders occupied the wide lacustrine basins of Wisconsin for an extended period of time, or swarmed there in prodigious numbers, or pursued the business of raising tumuli with systematic energy.

As the Indian tribes we know will not, and, so far as ascertained, never did work, there seems to be some warrant for thinking that they are not the remnants of the Mound-builders. Therefore, as no information is coming from them concerning these works, whatever knowledge we hope to secure must be derived primarily from the mounds themselves.

For this reason archaeologists feel the keenest regret that the great majority of these mysterious monuments of an interesting past have been entirely obliterated, or so far modified by graders, curiosity hunters, and long-continued agricultural operations as to be no longer noticeable by the ordinary observer and of no value to the scientist.

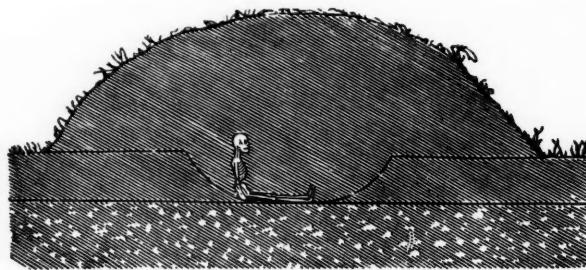
This almost sacriligious destruction began with the first appearance of the Caucasian and has continued to this day. In 1837 contractors graded down, on the so-called East Side of the city of Milwaukee, a ring or amphitheater, uniformly laid out like a race course or circus ring, and oval in shape, that was about 400 ft. in length and 300 ft. in breadth—one of the very rare forms of prehistoric earthworks. In 1838 other contractors on the West Side of the city demol-

ished, for filling, a high "hill," in which were found several human skeletons, a large number of flint and copper implements and utensils, and "two copper camp-kettles."

Wisconsin mounds have produced copper axes, hatchets, awls, fishhooks, bracelets, crescents, spearheads, arrow points, discs, spuds, etc., etc., but, so far as learned, no other specimens of "kettles." It has been claimed that these "kettles" were in the hands of the Olin Brothers until about 1840, and were examined by Increase A. Lapham, the most noted archaeologist of the state. Thereafter they disappeared and have not since come to public notice.

Usually, as in these cases, the destroyers have been without archaeological knowledge or instincts, and possessed no means of making permanent and accurate records of the contents, shape, size, or location of the works which they obliterated.

Could the case have been otherwise, and especially if the tumuli themselves could have been preserved undisturbed until now, the task of unraveling their history, in the more scientific atmosphere of to-day, would not present so many difficulties.



SECTION OF BURIAL MOUND, NEAR RACINE, WIS.

However, three things seem to have been acceptably well settled, viz.: That the Indians with whom the whites first came in contact knew nothing of the origin or uses of the earthworks with which they had been for generations surrounded; that the effigy mounds rarely contained human remains, utensils or trinkets, and that the conical tumuli were hardly ever devoid of human bones, implements or ornaments.

These facts gave rise to the belief, which still has a firm hold, that the pyramidal forms of earthworks were burial mounds only for the more conspicuous warriors, councilmen and chiefs of the tribes, and that the effigies represented the banners, badges or signs of the tribes or gens to which the buried notables belonged.

In some instances, we are told by somewhat untrained authority, several skeletons have been found in a single mound, buried, apparently, two or more above two or more others—as if in layers—and, of course, at different periods of time; but generally where this has occurred the lower remains seemed to be those of a single individual, ac-

companied by evidences that the deceased had been interred in a sitting or recumbent posture—sometimes in a completely upright position.

The famous old Sac war chief, Black Hawk (literally Black Sparrowhawk), was buried near the Des Moines River, in 1838, in a sitting position, with a spear or pike in one hand and an arrow in the other. Puncheons or rails of wood were used to prop up the body till it could be covered with earth, but if there has been any other modern burial of that sort no record of it has been found.

Dr. R. P. Hoy opened a large mound near Racine, in which he found the bones of a notable, as he supposed, sitting upright. He made a drawing of a section of the mound, which is herewith reproduced.

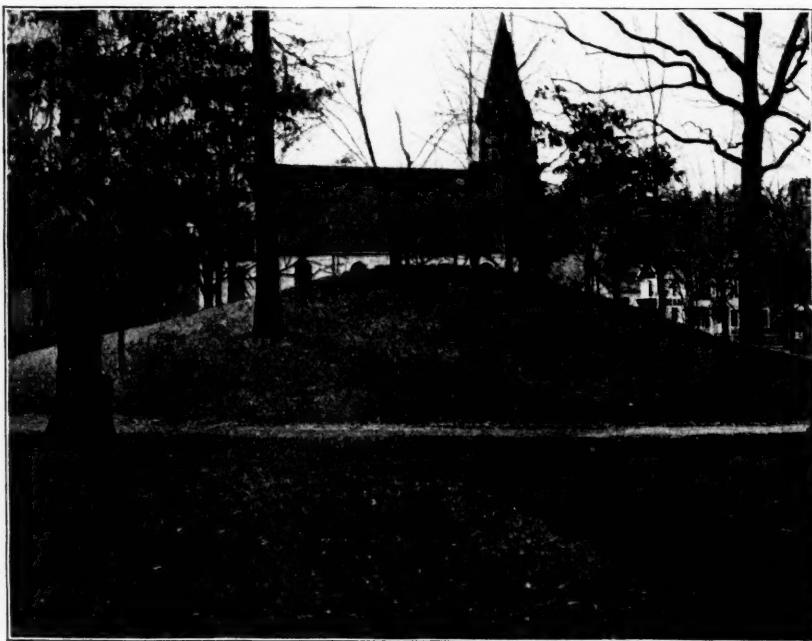
About 30 years ago W. W. Randall, United States Consul at Valparaiso, gave an account of burial methods and ceremonies among the Araucano Indians (or Tartars), of Chili, in which he stated that the corpses of common persons were dragged away from the camps and allowed to rot without any further attention, while the body of a dead notable; after it had been thoroughly smoked, was tied to a canoe-like coffin, made by hollowing out a suitable log, set in a hole in the ground amid fantastic and tumultuous ceremonies and then covered to the height of 15 ft. or more with earth brought by the members of his band or following from the surrounding country.

There are great pyramids of stone, adobe and earth in Mexico and Central America; mounds of earth in Bolivia, Peru and Chile, and conical tumuli without number from Lake Winnipeg to the Gulf of Mexico.

Are the Araucanos a remnant of a great mound building people that once occupied this vast tumuli-covered zone?

Wisconsin, which was once the richest area on the continent in prehistoric tumuli, implements, utensils and ornaments, is now taking active steps to preserve the undestroyed and unlooted remainder of her treasures, in order to be able to render more effective aid in answering this and other questions concerning her mysterious earthworks and their builders.

The State University (which lost its archaeological collection by fire), is preparing to give a course in archaeology. Beloit College is giving such a course and has from 40 to 50 students in the class. Carroll College at Waukesha and some other institutions in the state are preparing to do the same. The reports of the State Archeological Society are printed at state expense; a large mound area at Racine, with tumuli intact, has been dedicated forever to the uses of a public cemetery; the land on which the great "man mound" at Baraboo reposes has been purchased and will be enclosed and parked; fugitive archaeological material is being assembled into orderly collections; the so-called Cutler mounds at Waukesha have been acquired by the municipality, and, having been marked by a bronze tablet provided by the Waukesha Women's Club, are preserved as a part of a beautiful public park. The mounds on the campus of Beloit College are protected by a fund do-



CUTLER MOUND AT WAUKESHA, WIS.

nated by Dr. Emerson; the Wisconsin Federation of Women's Clubs has created a Landmarks Committee, which, headed by Miss Julia A. Lapham (daughter of the late Increase A. Lapham), is active in carrying out the purpose for which it was appointed. The Milwaukee Museum is circulating among the pupils of the public schools sets of Wisconsin prehistoric implements and ornaments, accompanied by appropriate explanatory circulars. The extensive collection of the Wisconsin State Historical Society is kept constantly open to the public and available to students; the legislature is being urged to take steps to preserve the remains of the very remarkable prehistoric city of Az-talan; several county historical associations are giving practical attention to the prehistoric remains in their localities, and altogether the state is taking a lead which, though it should have been taken years ago, promises valuable results and ought to stimulate sister states to inaugurate a similar practical work.

FRANK ABIAL FLOWER.

Washington, D. C.

## THE AUTOBIOGRAPHIC ELEMENT IN LATIN LITERATURE AND INSCRIPTIONS

### PART II

**T**HE poetic epitaphs in turn give voice to much the same ideas as the prose. Thus the larger number of the poems in which the living speak, both pagan and Christian, contain details of the life of the deceased in prose or verse, followed by a poetic *laudatio*. Noteworthy is the following elaborate production from near Rome (C. I. L. VI, 25063, Büch. 1549, Figures 4 and 5):

Ah, fate too cruel! I, a grieving spouse and sire,  
Lament two strokes of death, wrought by the mournful god.  
It was enough, O Ferryman, to have borne my wife  
On your bark, to have her, torn from me, lie in your seat.  
Clotho once more decreed the rending of the thread,  
That sadly, as before, she might tear my son from me.  
'Twere fitting that I first should meet my final doom.  
And you, my son, should give me such last offices.  
Haste not, you who are bound by similar fates.  
So that you, too, may read the years, the names, on the stone.  
Twice eleven years she lived, the son indeed twice six,  
His name was Probus, hers in turn Athenais.  
What wails, for thee, my son, will I, thy sire, arouse,  
While the wave doth hold thee prisoner in the Stygian mere!  
How well, little one, you bloomed those twice six years,  
How men believed my prayers were pleasing to the gods!  
Your bright, unspotted thread the Fates rent suddenly  
And bore away from me at once my vows and prayers.  
When, son, I weep for thee, the Attic songstress wails,  
And Siren will attend her, to lament my wife,  
And ever with a dying strain the Halcyon mourn,  
And e'en sad Echo with me will sound back the dirge,  
The Oebalian swan utter with me its low sad notes.

So, also, if the dead speak, the poetry is of the same tenor as the prose. Commonly we have a narration of autobiographic details and self-laudation; for these as early as the II century B. C., two types had been developed at Rome. These types, otherwise alike, differ essentially in one respect, that the first never addresses the passer-by, the second always does so, either at the beginning or end, or both.

The first type was favored by the higher officials. Our first datable epitaph, written for one of the Scipios in 138-7 B. C., (C. I. L. I, 38—VI, 1293, Büch. 958), is of this kind. It reads:

Gnaeus Cornelius Scipio Hispanus, son of Gnaeus, prætor, curule aedile, quæstor, tribune of the soldiers twice, decemvir for judging suits, decemvir for performing holy rites.

By my worth the virtues of my race on high I piled,  
Offspring I bore, vied with my father's fame.  
My elders gave me praise, glad that I was their child;  
My glory added honor to our name.

The earliest example on stone of the second type fully worked out runs (C. I. L. VI, 33919a, Büch. 848) :

O youth, although you haste, this little stone  
Begs that you look, then read what's writ thereon.  
Here do the bones of Lucius Maecius lie,  
The goldsmith, Philotimus. This did I  
Desire for fear you might not know. Good-bye.

This last, it will be observed, is the same as the supposed epitaph of the poet, Pacuvius, found in Gellius, barring the name; but, as Bormann has conclusively proved,<sup>4</sup> we must not think for a minute that



ELABORATE POETIC EPIGRAPH OF PROBUS AND ATHENAIS, CAPITOLINE MUSEUM, ROME. [FIG. 4.]

Pacuvius originated this poetic form. The so-called epitaphs of the poets, Plautus and Nævius, have long since been shown not to be the work of their reputed authors; no more, it is now clear, had Pacuvius anything to do with the "epitaph" bearing his name, which is a poetic type prevalent in his time.

A few briefer epitaphs that do not follow one of these poetic types need not be mentioned in detail, as they express the same familiar ideas common to the formulæ and individual prose epitaphs.

<sup>4</sup>Die Grabschrift des Dichters Pacuvius und des L. Maccius Philotimus, in *Archäologische-Epigraphische Mittheilungen*, vol. 17, (1894), pp. 227-239.

Apart from dedications and epitaphs, inscriptions containing autobiographic elements are few. Hardly any honorary inscriptions have them; and in large numbers of others, as private documents like the wax tablets of Pompeii, and marks on various small objects, as pottery, collars of slaves, and the like, the autobiographic expressions are stereotyped.

But two kinds of the inscriptions remaining are of paramount importance. First, there is a class not hitherto separately noticed, that may be called autobiographic records. They are varied in content, but all have the same purpose as that of the first class of literary



VIEW OF WALL WITH THE EPITAPH IN 4 (UPPER L. HAND CORNER),  
SHOWING A VARIETY OF TOMBSTONES AND CINERARY  
URNS, CAPITOLINE MUSEUM, ROME. [FIG. 5]

autobiographies, simply to give information that reflects credit on the persons named. Some present details of the construction of public works, others requests regarding tombs, still others from Salona, the performance of religious duties. But the most valuable is the so-called milestone of Publius Popilius, already mentioned (C. I. L. I, 551—X, 6950); as it is the first Latin prose autobiography known, I translate it in full:

I made the road from Rhegium to Capua, and on that road made all the bridges, milestones, and courier stations. From here to Nuceria it is 51 miles, to Capua 84, to Muranum 74, to Consentia 123, to Valentia 180+, to the strait

at the statue 231+, to Rhegium 237, total from Capua to Rhegium 321+. And I also, as prætor in Sicily, sought out the runaway slaves of the Italians, and returned 917 men. And I also first brought it about that the shepherds should withdraw from the public lands in favor of the farmers. I made here a forum and public buildings.

To this class of autobiographic records I should assign the *Monumentum Ancyranum*. The inscription, of which this is a copy, placed before Augustus's tomb as an *index rerum a se (me) gestarum*, related in a way that supplemented his earlier literary memoirs, the events of his reign, as Popilius 150 years before wrote his humbler record on stone, and placed it in a similarly conspicuous position.

The *graffiti* form a second and even more interesting class. Two groups of them have less of a transitory character than the others. Ancient "globe trotters," like modern ones, wanted people to know that they had been to see the sights; thus on the famous statue of Memnon, many Roman soldiers left their names and dates, with *audi Memnonem* and the like, some even invoking the Muse. And elsewhere, in Egypt, at Talmis, Thebes and Philæ, people left records of their visits; while one man has touchingly written on one of the Pyramids (C. I. L. III, 21, Büch., 270):

I saw the Pyramids without thee, brother most dear.  
And here, as best I might, for thee dropped a sad tear:  
And this lament I carve, to keep our grief ever bright.  
May the name of Gentianus upon the Pyramid's height,  
(The pontiff, at thy triumphs, Trajan, close by thy hand,  
During three decades censor, consul), thus ever stand.

Again, at Rome and Ostia, the firemen, having performed an unpleasant duty, wish all to know it; so on the walls of their barracks they have scratched inscriptions like this (C. I. L. VI, 3075):

In the third consulship of our lord, the Emperor Alexander (220, A. D.), I Terentius Felix, of the century of Aulus, faithful to their divine majesty, performed the *sebaciaria* (whatever that is) for the month of May; safety to my fellows!

Apart from these two classes we have in the *graffiti* only glimpses of the business of an hour or the momentary thought. The prose is a queer mixture, simple notices that "I, so-and-so, have been here," notes of repairs to shoes, sums won at dice (honestly, the winner assures us), a laundry list, greetings and wishes, a fragmentary letter, recommendations of candidates, even in a tomb an imaginary dialogue between dead and living. The poetry, if not sententious, deals with the tender passion, and certainly gives us an insight into the minds of those who wrote it. For instance, it takes no great stretch of imagination to picture the state of mind that brought forth this (C. I. L. IV, 1824, Büch., 947):

Come here, you that love, Venus' ribs I will crack  
With a cudgel and wear out the dear goddess' back.  
If that tender organ, my heart, she can prick,  
Why may I not smash in her head with a stick?

Our conclusions may be briefly stated. The Romans possessed the autobiographic feeling to a remarkable extent, as shown in the literature and the inscriptions. In the literature, this led to the development of autobiography as a literary form rather late in the II century, B. C. In the inscriptions this feeling is displayed earlier and on a much wider field, as all classes employ autobiographic elements, not merely a few nobles or Emperors. On the other hand, in the inscriptions, especially dedications and epitaphs, a natural tendency to formulæ and religious conservatism tried to confine this feeling to simple variations between personal and impersonal expressions in the regular epigraphic forms and to a series of new autobiographic formulæ; further, the common people are capable of only a few well-worn ideas, and apply to professional stonecutters and poetasters for the literary forms of their inscriptions, which tend to become stereotyped. But the feeling easily prevails over all, and, though often curbed, is always present; so from the *Monumentum Ancyranum* to the hasty scrawls of idlers, it is a characteristic feature of the epigraphic records, which makes their authors seem less classic and more human.

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## PRE-INDIAN INHABITANTS OF NORTH AMERICA<sup>1</sup>

### PART I

ALTHOUGH we have no relics of a race [in Minnesota] earlier than the earliest quartz-workers at Little Falls, who were cotemporary with the closing scenes of the latest of the Glacial epochs, we are compelled to admit that those quartz-workers had an earlier ancestry, and an existence which extended far into the ages which are, in geological terms, denominated Glacial and Pleistocene. Without, at present, going into the question of their origin, and of their chronologic relations with those earliest people, who inhabited Asia and Europe in Glacial and Pleistocene time, it will be germane to our purpose to refer to some American evidences of the existence of man in Glacial and Pleistocene time.

#### PLEISTOCENE TIME

For the purposes of this chapter it may be stated that Pleistocene time was a long period of comparative quiet, following the close of the Tertiary volcanic violence, when many of the mountain ranges and of the stupendous phenomena of the continent had their birth. The forces

<sup>1</sup>This paper constitutes a chapter by Prof. N. H. Winchell, in a more elaborate work in preparation on the *Aborigines of Minnesota*. It is here published by permission of the secretary of the Historical Society of Minnesota.

which gave origin to these features of the continent became dormant, or at least quiescent, and at the present day they are manifest only in a few volcanoes that retain their heat, and in the occasional earthquakes that show that the mountains are not yet finished. This long period of time (Pleistocene) was terminated with the remarkable Glacial epoch, or epochs. It is in the products of the Glacial epoch that are found the remains of man, and of his manufacture. These evidences of earliest man in America have been vigorously scrutinized and questioned by some authorities, and have been reasserted, as well as increased, by later special examinations by others. The evidence has constantly grown more voluminous and convincing. At the present day it seems that the existence of man in America in Glacial time is well-nigh established. If it were fully established, that would imply pre-Glacial, *i. e.*, early Pleistocene, man, during which period flourished also many large mammals, now extinct.<sup>2</sup>

There is a formation of Pleistocene time, peculiarly American, designated *Equus beds*, which has furnished, according to Cope and Williston, some human remains,<sup>3</sup> and these are believed to be the oldest human remains that have been recognized in America. They are associated with the remains of certain extinct animals. They have been described in Oregon, Texas, Kansas, Nevada, Colorado, and the valley of Mexico. The *Equus beds* cannot be distinguished physically from the loess, in which most of the same fossils have been found. Geographically, they seem to be restricted to the area south of the terminal moraine of the Wisconsin epoch of glaciation. The fossils show that at that period lived the bison, mammoth, megalonyx, mastodon, camel, llama, peccary, moose, and extinct species of horse; and some of these survived into Glacial and even post-Glacial time. These beds are regarded as the equivalent of the *Megalonyx beds*, and are also probably cotemporary with the *Megalonyx* and other fossils found in some caves.<sup>4</sup> These beds were at first referred to the Pliocene, the latest of the Tertiary, but on the recognition of the interglacial epochs of the Glacial period, which were accompanied by desiccation, alternating with ice-incursions, which were epochs of flooding, it appears more probable that the stratified beds holding these remains belong to some of the epochs during which the country further north was covered by glaciers. According to Udden, the *Megalonyx beds* are contemporaneous, "at least to some extent," with the *Equus beds*, and a remnant, at the point where they were examined by him, in central Kansas, "of the last general deposits of the plains in this region." Mr. F. W. Russell has described<sup>5</sup> a similar loess-like deposit in Nebraska, and Prof. L. E.

<sup>2</sup>Those who desire to consult authorities on the existence of Glacial man in America, we would refer to the Bibliography which will be published at the end of Part III of this article in July, 1907.

<sup>3</sup>Cope. *Tertiary Vertebrata*, p. 4; *American Geologist*, Vol. 2, p. 293, 1888; Williston. *Kansas University Geological Survey*, Vol. 2; also *Trans. Kansas Acad. Science*, 1897.

<sup>4</sup>Merriam and Putnam, in *American Anthropologist*, Vol. 8, 1906.

<sup>5</sup>Russell. *American Geologist*, January, 1891.

Hicks,<sup>6</sup> "an old lake bottom." A "forest bed" lies at the bottom of this deposit described by Mr. Russell, on the Middle Loup fork, and under the forest bed in a red clay, apparently Glacial. In some places, however, the red clay is wanting, and the forest bed there is immediately above beds that are Tertiary. This formation is in the valley, as low as the river, except where Tertiary beds remain to take its place.<sup>7</sup>

#### GLACIAL TIME

The Glacial epoch, which may be considered a part of the Pleistocene, was characterized by the occurrence of glaciers at temperate latitudes. It was formerly thought that Glacial time was short and simple, but it has been found to be long and complex. Glaciers covered Minnesota not once only, but twice and thrice, at least, and between them were interglacial epochs. The scheme of glacier succession has been made out most definitely in Iowa, by the geological survey of that state, and by Mr. Frank Leverett in states further east for the United States Geological Survey. It is necessary here to state only the results of these studies, though they have entailed a long and laborious research, in which the various states and numerous geologists have participated, the details and progress of which can be found by consulting the official reports and the geological journals issued during the last 30 years.

Following is the table of Glacial and inter-Glacial stages, as published by Prof. S. Calvin, of the Iowa survey:

*First Glacial stage:* Pre-Kansan, or sub-Aftonian. First inter-Glacial stage; Aftonian.

*Second Glacial stage:* Kansan. Second inter-Glacial stage; Yarmouth, in Iowa, Buchanan.

*Third Glacial stage:* Illinoian. In Iowa, Buchanan. Third inter-Glacial stage; Sangamon. In Iowa, Buchanan.

*Fourth Glacial stage:* Iowan, which formed the main loess deposit. Fourth inter-Glacial stage; Peorian.

*Fifth Glacial stage:* Wisconsin.

In Minnesota some of these distinctions can be identified in general terms, but the geographic areas of the deposits of different ages have not been traced out. The most of the state is covered by drift of the Wisconsin Glacial epoch. It was characterized by the formation of the terminal moraines which are well known in the state, and which extend across states further east, and to the Atlantic seaboard. Immediately below the Wisconsin drift has been found in many places an older sheet of till.

<sup>6</sup>Hicks. *Bull. Geol. Soc. Am.*, Vol. 2, p. 25.

<sup>7</sup>In *Science*, Vol. VII, 386, Dr. G. K. Gilbert maintains that the *Equus* fauna "belongs to the upper Quaternary (late Glacial) and not to the upper Pliocene, where it had been assigned by students of vertebrate paleontology."

Professor Calvin says of the Wisconsin drift:

It is very much younger than the Kansan or pre-Kansan. There is an enormous interval between the earliest and the latest of the ice-invasions. The earlier Glacial and inter-Glacial stages seem to have been longer than those of later date. Some of the inter-Glacial intervals were many times as long as the period which has elapsed since the disappearance from Iowa of the great ice-fields which characterized the Wisconsin stage of glaciation. If the time since the Wisconsin is taken as unity, the time since the Kansan is at least 20. The history of glaciation in Iowa is long; the records are exceedingly complex.

During this succession of great physical changes it is apparent that the denizens of the land suffered great climatic fluctuations. They became extinct or migrated to the south. Man, if he lived in America at the time, gradually moved southward as the severity of the seasons increased, and, on amelioration of the climate, he as gradually retraced his steps, accompanied, in each inter-Glacial epoch, by his associates both in fauna and flora.

The time involved in these migrations has been computed roughly in years by assuming post-Glacial time as unity. This unit has been agreed upon nearly unanimously by geologists as about 8,000 years. The time elapsed since the Kansan epoch, according to the ratio given by Calvin, would thus amount to about 160,000 years. If allowance be made for the Aftonian inter-Glacial epoch and for the pre-Kansan Glacial epoch, it would not be an overestimate to say that the first ice-invasion advanced upon the temperate latitudes at least 200,000 years ago.

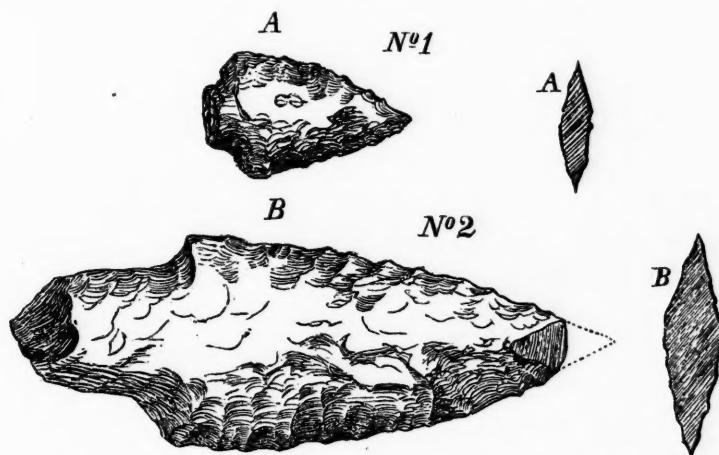
This element in the history of human habitation in North America becomes more and more important as the remains of man's industry and of his bony skeleton sporadically come to light in the drift deposits.

If we except those problematical evidences of man found, as already referred to, in the *Equus beds*, and discard all claims that have recently been put forth, of the discovery of man in the Tertiary in other parts of the world, we have still a very respectable antiquity for man in America, based on actual discoveries.

#### MAN IN THE GLACIAL PERIOD

*THE IOWA LOESS.*—In 1874 Prof. S. Aughey described the discovery of human implements in the loess deposits of the Missouri Valley. This deposit is a dependency of the Iowan Glacial epoch, formed about the southern margin of the continental glacier of that epoch. Its relation to the *Equus beds* is not established, but it is presumed to be later in date. These implements, one of which was said to lie immediately beneath an elephantine vertebra, according to McGee, "appear to have been dropped on the bottom of the shallow lake, or muddy swamp, within which the loess was accumulated. Since the loess itself consists of Glacial mud, and since the basin, in which it was deposited was bounded on the north by the Quaternary *mer de glace*, the climate must have been cold, and the associated elephantine remains

prove the association of man and the mammoth. The relics themselves throw little light upon the habits of their makers, but suggest that they were well advanced in the fabrication of chipped implements.<sup>8</sup> They seem to have been as far advanced in this art as the pre-Columbian Indians of America. Numerous similar points are found in Minnesota, the product of the present Indian.



ARROWS FROM THE LOESS

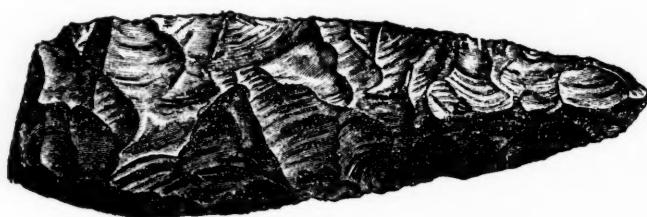
Arrows found in the Loess; after Hayden. No. 1 was found 3 miles east of Sioux City, in Iowa, 15 ft. below the surface, No. 2 was found 2½ miles southeast of Omaha, in Nebraska, 20 ft. below the surface, and beneath a vertebra of an elephant. These places are in the immediate valley of the Missouri river, but north from Lansing, Kans. (See Hayden's report on Colorado, 1874, p. 255.)

A chipped obsidian implement was found by McGee in 1882, imbedded in a similar sediment in the valley of the ancient Lake Lahontan, in western Nevada. This ancient sediment was cotemporary with a glaciation whose abundant waters filled the valley with a saline-alkaline lake.<sup>9</sup> It is represented by the figure below, natural size. "In material, size, general form, mode of chipping, and freshness in appearance it is undistinguishable from the arrow points in use to-day by the Piute Indians of the vicinity. It should be mentioned that this fresh aspect is paralleled by that of the fossil bones found in the same stratum of white silt. These bones are perfectly white, not at all mineralized, and, when found in fragments, not readily identifiable, may easily be discriminated from long-weathered recent bones by their greater porosity and less weight."

<sup>8</sup>Popular Science Monthly, Vol. 34, 1885, p. 27.

<sup>9</sup>An obsidian implement from the Pleistocene deposits in Nevada, Am. Anthropologist, Vol. 2, p. 301, Oct., 1880.

The age of the Nevada arrowhead, according to Russell and Gilbert, seems to have been that of the last, or Wisconsin, ice-incursion; and in this case also the arrow-maker was well advanced in the art. The fossils associated with this silt-stratum, seem to indicate, however, the age of the *Equus beds*, which tends to make the silt Iowan, or earlier, rather than Wisconsin, and thus to be rather a cotemporary than a successor of the implements found by Professor Aughey in the Missouri River loess.



OBSIDIAN ARROWPOINT FROM THE NEVADA LOESS. WALKER VALLEY, NATURAL SIZE. AFTER M'GEE

There have been a number of other discoveries of human remains in the loess of the Iowan epoch. According to a calculation by Professor Aughey, based on the extent of this deposit and the rate of accumulation of river sediment in small marginal lakes adjoining the present Missouri River, the Loess age had a duration of 19,200 years. Such a lapse of time, or even one-half that length of time, is sufficient for the burial of many human implements and human skeletons, and numerous remains of the great quadrupeds cotemporary with them. It may be expected, therefore, that such discoveries will be multiplied in the future. Other instances are given below. Part of these discoveries lack some elements necessary to make them perfectly satisfactory and convincing, but taken as a group, it is not easy to discard the result toward which they point—the more so as they are corroborated by other discoveries that are well authenticated. As long as a few isolated discoveries stood alone unverified it was customary to hang a doubt on the lacking elements, and to discard them simply as insufficient proof of the presence of man in the age of the loess. That was the conservative habit of archæologists.

Some years ago (1878) a fossil human skull was found by Thomas Belt, in what was supposed to be the western extension of the loess in Colorado.<sup>10</sup> It was found near the watershed between the South Platte River and Clear Creek. It was in "undisturbed loess," in a railway cutting, about two miles from Denver. "All the plains are

<sup>10</sup>*Eleventh annual report of the Peabody Museum of Archaeology, Cambridge, p. 257;*  
*Vol. II, of the reports of the Museum, 1880.*

covered with a drift deposit of granitic and quartzose pebbles overlaid by a sandy and calcareous loam, resembling the diluvial clay and the loess of Europe. It was in this upper part of the drift series that I found the skull." "Belt's untimely death prevented final statement of the geologic position of the Colorado skull." (McGee.)

McAdams has reported the finding of a stone axe 70 ft. beneath the surface in loess, in Illinois.<sup>11</sup> This is vouched for by 3 sworn affidavits. The simple recital of the details of this find is of itself evidence of its trustworthiness.

Witter, in 1892, described the finding of arrow and spear points in the loess at Muscatine, Iowa, accompanied by land shells, the bones of at least two American reindeer, elk, and a fragment of an elephant's tooth; and Professor Calvin referred, in the discussion of these,<sup>12</sup> to arrowpoints found in the loess at Council Bluffs some years ago.

The great loess sheet being of the age of the Iowan drift epoch, as stated by all geologists who have investigated its relations to the drift deposits, the finding of a human skeleton at the bottom of the loess near Lansing, Kans., 1902,<sup>13</sup> proved to be one of the most convincing proofs of the great antiquity of man in America. This was on the bank of the Missouri River, on the farm of Martin Concannon, in the excavation of a tunnel, at 70 ft. from the entrance of the tunnel, and about 23 ft. below the natural surface. The skeleton lay in the geest<sup>14</sup> of the pre-loessian epoch, but probably was not much older than the loess of the region, and associated with the skeleton, but lying a little higher was found an artificial chert chip.<sup>15</sup> According to Prof. W. Holmes and Mr. Alex. Hrdlicka,<sup>16</sup> the characters of this skull are not such as to indicate a low order of intelligence, and are perfectly comparable to the skulls of the present Indian. This agrees with other loessian human relics in showing that the Iowan Glacial man was capable of the fabrication of implements equal to those of the modern Indian. At that date nothing in art has yet been discovered in America indicating an inferior type of man.

As the Lansing skull has become celebrated for the importance and completeness of the testimony it bears to the existence of man in, or before, the Iowan epoch, it is illustrated by two plates made from photographs which first appeared in the *American Anthropologist*, and later in the *American Geologist*.

The "Clayton stone axe," so-called, was discovered, according to the statement of Dr. Cyrus A. Peterson, in RECORDS OF THE PAST, vol 2, p. 26, 1903, below 14 ft. of common loess, near Clayton, Mo., 15

<sup>11</sup>Ancient mounds of Illinois, Am. Assoc. Adv. Sci. XXIX.

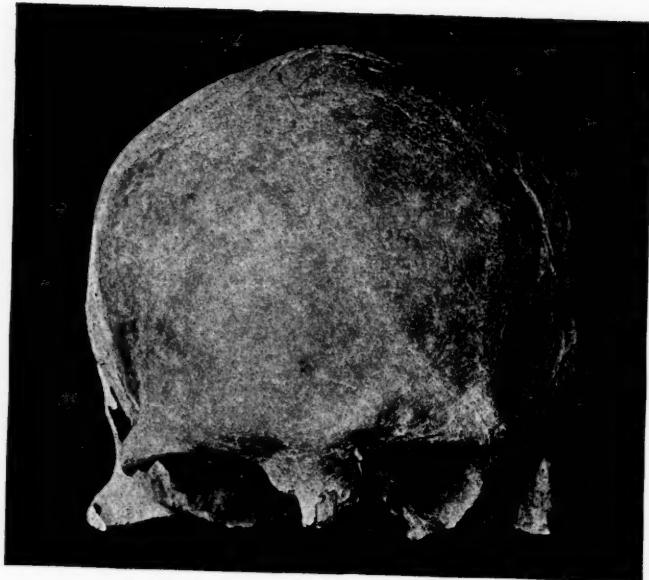
<sup>12</sup>Iowa Academy of Science. Sixth annual session, Dec., 1892; *Science*, Vol. 19, (1896), p. 22; *Am. Geologist*, Apr. 1892, Vol. 9, p. 276.

<sup>13</sup>Williston, *Science*, August 1, 1902; Upham, *Am. Geologist*, Sept., 1902, and RECORDS OF THE PAST, Sept., 1902.

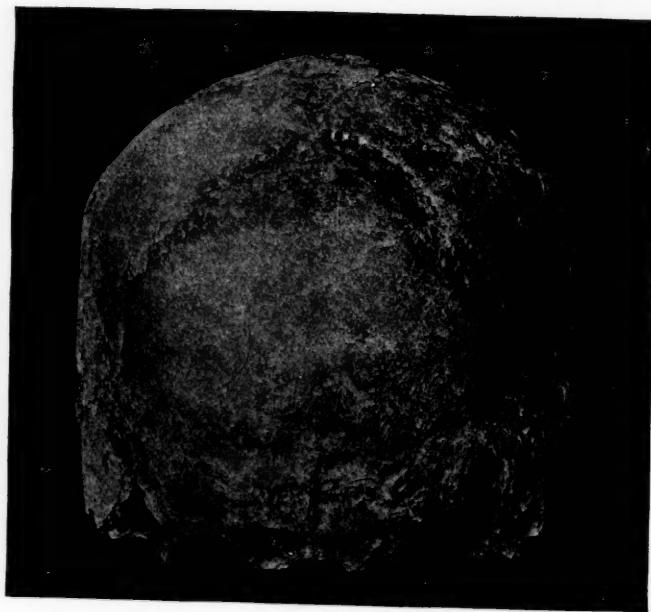
<sup>14</sup>Geest is the surface residuum of the natural decay of rocks *in situ*, and in this instance was chiefly a kaolinic clay.

<sup>15</sup>American Geologist, Vol. 31, p. 298, 1903.

<sup>16</sup>American Anthropologist, Vol. 4 (U. S.), Oct.-Nov., 1902, and Vol. 5, Apr.-June, 1903.

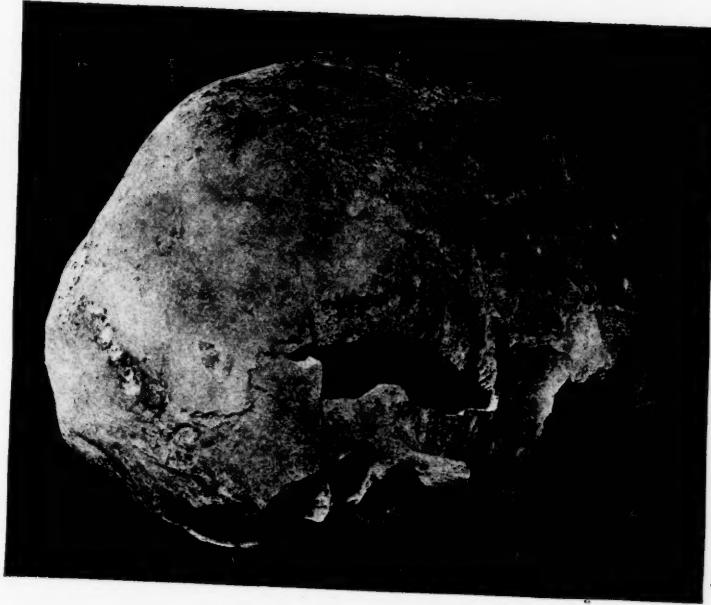


*a*



*b*

THE LANSING SKULL (FRONT AND BACK VIEWS)



*d*  
THE LANSING SKULL (SIDE AND TOP VIEWS)

miles from St. Louis. It is a smooth, "hafted" implement, 5 in. long,  $3\frac{1}{4}$  in. wide, "and shows evidence of use both on the poll and on the edge."

Miss Luella Owen, in 1899, published an account of the finding, in 1897, of a large stone axe imbedded in the loess of the bluff on the west side of the Missouri River, near Atchison, Kans., and 20 miles south of St. Joseph, Mo.<sup>17</sup> It is an unusually large implement of its kind, weighing  $7\frac{1}{2}$  pounds, grooved and polished, and was 4 ft. below the natural surface, and about 240 ft. above the low water mark of the Missouri. It was at a stone quarry, and about 4 ft. of loess intervened between the axe and the surface of the rock. Immediately above the rock, however, was a foot of clay, apparently formed by disintegration



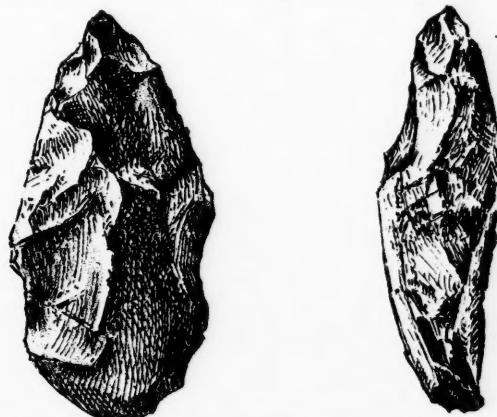
STONE AXE FOUND BY MISS OWEN, NEAR ATCHISON, KANS.

of the limestone in place. Pieces of the limestone associated with the axe had the appearance of having been burnt, indicating the former existence of a camp fire. The fact and the circumstances of the discovery of this stone are protected from discredit by the legal affidavit of the foreman of the quarry. There is no higher point in the vicinity. The surface of the bluff slopes both to the west and to the north, and it is easily seen that the axe could not have been buried by "wash." The appearance is that the loess is in its original condition, and hence that the axe dates from the accumulation of the loess, which was at the time when the Iowan ice-sheet was still extant over Minnesota. This is certainly a "neolithic" implement.

In 1885, an important discovery was made at Madisonville, Ohio, by Dr. C. L. Metz. The specimen consists of an implement chipped from a pebble of black flint, taken from gravel 8 ft. below the surface,

<sup>17</sup>Souderabdruck aus dem Verhandlungen des VII internationalen Geographen-Kongresses in Berlin, 1899, pp. 686-690. *The Bluffs of the Missouri River.*

but immediately overlain by loess. It is probable that the implement does not much antedate the loess, although it is said to have been found "just below the surface of the gravel." It is of the type of the specimens from the Trenton gravels, and that fact indicates its Wisconsin age. With the data at hand it is impossible to determine whether the gravel referred to belongs to the flood stage of the Iowan or the Wisconsin ice-epoch. It is represented by the cut below.



CHIPPED PEBBLE OF BLACK CHERT FROM MADISONVILLE, OHIO,  
8 FT. BELOW THE SURFACE

In 1887, Dr. Metz made a similar discovery at Loveland, Ohio, 30 ft. below the surface, in a deposit of sand underlying very coarse glacial gravel, which latter must be attributed to the Wisconsin epoch. This implement was not far removed from bones of the mastodon.<sup>18</sup>

In the *American Anthropologist*, vol. VIII, p. 42, 1905, Mr. A. E. Sheldon records and carefully describes ancient fireplaces found in the bad lands of South Dakota, imbedded in the strata that constitute the bluffs of the Lost Dog Creek, in the Pine Ridge Indian Reservation. This creek enters White River from the southwest, not far below the mouth of Wounded Knee Creek. These fireplaces, of which 7 have been discovered, are accompanied by kitchen refuse, fragments of pottery, and arrow points.

The soil above these fireplaces exhibits from 8 to 12 distinct strata, each 4 in. to 15 in. in thickness and varying in substance from black loam to yellow gumbo clay and soft sandy grit. A careful vertical section of these strata was taken out and is now preserved in the museum of the Nebraska Historical Society at Lincoln. It was observed that the stratum of soil at the level of the fireplaces was uniformly of a black humus material, with stray root-fibers here and there, indicating clearly that this was the surface of the ground at the time the Indians built the fires and scattered the debris from their kitchens. One or two feet above this layer of black soil is a thick stratum of fine gray silt, indicating a deposit in comparatively still water. Scattered thickly through the silt are the shells of several varieties of periwinkle and other fresh water mollusks.

<sup>18</sup>*The Ice Age in North America*, Wright, p. 532.

According to the description of the region given by Mr. Sheldon, these strata were formed when the Lost Dog Creek, and consequently the valley of the White River, was buried under a wide expanse of still or gently moving fresh water. That would imply that all the valleys of the region must have been similarly buried under a sheet of fresh water, which drained toward the Missouri. It would seem to imply also that the Missouri River was in a similar condition—a condition identical with that during which was deposited the well-known loess which formerly filled and still occupies that valley, and in which have been found, as already noted, other relics of human habitation of a type similar to those of the present Indian.

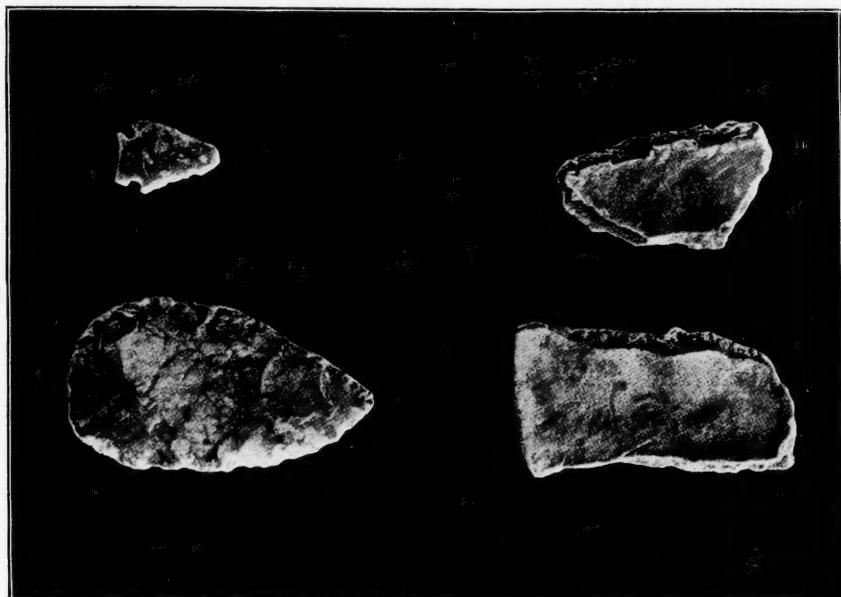
We do not know what may be the age and nature of the strata forming the bluffs of Lost Dog Creek, below the level of the little relic-bearing stratum.<sup>19</sup> If they are of the Cretaceous or Tertiary, as is quite probable, the ancient surface on which was accumulated the humus soil where these relics occur, was doubtless pre-Iowan, and the strata that enclose and bury them are Iowan loess. If the underlying strata are neither Cretaceous nor Tertiary, but consist of loess similar to the strata that overlie the ancient soil, then the human relics could be referred to the pre-Wisconsin inter-Glacial epoch. But as the Iowan was pre-eminently the loess-forming epoch it is much more likely that these relics are pre-Iowan. They agree in type with those already mentioned from the loess in pointing to a race of men not at all inferior to the present Indian. An examination directed to the determination of the nature and extent of the non-conformity denoted by the humus layer, would doubtless result in reaching some interesting conclusions. At Lansing the Iowan loess is non-conformable upon the carboniferous rocks, although both formations are nearly horizontal.

Still later, and quite recently Prof. F. W. Putnam has described bone fragments taken from ancient caves in California, which show evidence of human working. The associated other fossil bones are of an extinct fauna that marks the age of the latter half of the Pleistocene, comparable with the Iowan Glacial epoch.

Lastly, in the year 1906, human bones were reported from the undisturbed loess of Nebraska, near Omaha, the region in which, in 1874, Aughey reported the discovery of arrow points in the loess. A succinct and lucid description of the conditions of this discovery was given in *Science*, January 18, 1907, by Prof. E. H. Barbour, who thoroughly examined the spot.<sup>20</sup> A curious circumstance attends this case,

<sup>19</sup>Dr. A. C. Peale in *Science*, Vol. VIII, p. 163, seems to describe the area of northwest Nebraska, and hence the area of the fireplaces of Sheldon, as "Loup Fork Tertiary," a formation which terminates upward by gently blending into the post-Pliocene of Hayden, which latter beds were accumulated in fresh water. The Loup Fork contains abundant vertebrate remains. Hayden defined the Loup Fork as extending southward from Niobrara river, which is next south of the White river. Ancient hearths in the alluvium of the Missouri river, attributed to the modern Indians, have been described by Dr. W. J. Hoffman, *Proc. Bost. Soc. Nat. Hist.*, Feb., 1876.

<sup>20</sup>See also *The Nebraska Loess Man*, by Gilder, and *Ancient Inhabitants of Nebraska*, by Barbour, in RECORDS OF THE PAST, Feb., 1907.

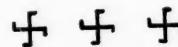


FLINTS AND POTSHERDS FROM LOST DOG CANYON FIREPLACES, PINE RIDGE RESERVATION, SOUTH DAKOTA

viz: There are human remains of two ages, one directly above the other. The lower bones are in "undisturbed loess," and seem to be extended over a considerable area, from 6 to 12 ft. below the surface of the loess; directly over them, and at the summit of a hill formed by drainage circumdenudation, the aborigines had constructed an earth-mound, which also contained human bones. The loess bones were dissociated, scattered, and fragmental. The skulls are distinctly neanderthaloid.

NEWTON HORACE WINCHELL.

St. Paul, Minn.



#### PALESTINE EXPLORATION

**T**HE delay in getting from the Turkish government leave to excavate was never so long as in this case. It seemed as if it was never to come, and subscribers to the work of the Palestine Exploration Fund were much discouraged. Even when it was granted, the illness of the London secretary prevented the word being promptly sent to America. But now the trouble is over and Mr. Macalister is at work again. Of this the London circular, which I shall gladly send to inquirers, speaks as follows:

When Mr. Macalister commenced work at Gezer, no one expected that he would find the untouched cremated remains of a cave-dwelling race which was not acquainted with metal, or the undisturbed dead of one of the Canaanite tribes with their bronze weapons, and food vessels of hand-made pottery, or a Canaanite "high place" with the bones of newly-born infants who had been sacrificed, apparently, to some unknown deity, or the bones of infants buried under the corners of house walls. Yet these unique discoveries have been made, and others which have supplied a chronological starting-point for the archaeology of pre-Israelite Canaan, and have thrown light upon the domestic life of the Amorites and of the Israelites under the judges.

By the expiration of the time for which the late "permit" was granted, the excavations ceased, in the autumn of 1905. A new permit was shortly after applied for, and was granted in February last. The Committee felt that, having already opened up so much of the site, with good results, and having ascertained with some accuracy the position of the city walls and gates, it would be a pity to leave more than half its area unexamined. They therefore decided to pursue their investigation of the remaining site, leaving Mr. Macalister some discretion as to examining the surrounding hillsides within the limits of the permit. He has now begun again in earnest this second period of his researches at Gezer.

With the decision to continue work at Gezer all will agree there must be no more hasty work as at Lachish, where a tablet was found just as the first permit expired, and no other was sought for. We can learn more from one *tell*, thoroughly explored, than from many slightly excavated. So now all is happy expectation again, and the *Quarterlies* will be read with an interest which they can never have in the intervals of permits.

I am pleased to learn that an elaborate study of the Samaritans, on which Prof. J. A. Montgomery, of Philadelphia, has been engaged many years, is ready for publication. It is a difficult subject, calling for patient and extensive research, but of this the author is fully capable. It will be a book of 400 pages, fully illustrated.

THEODORE F. WRIGHT.

42 Quincy St., Cambridge, Mass.



## EDITORIAL NOTES

**SPHINXES NEAR SERAPEUM.**—Near Serapeum, Northern Africa, a number of interesting sphinxes with fine female heads, have been found. With them were funeral masks of marble to which beards and hair of stucco were attached.

**INTERNATIONAL ARCHAEOLOGICAL CONGRESS.**—The notice of the next International Archaeological Congress, given in our April issue, should have read, "The next Congress will meet in Cairo, from April 10 to 20, 1909."

**PUEBLO VILLAGES NEAR SANTA FE, NEW MEXICO.**—Near Santa Fe, N. Mex., are a number of ruins of Pueblo villages lit-

tle known, but whose excavation would doubtless be of great archæological value. Three or these, one at Agua Fria, southwest of Santa Fe; one on the Arroyo Hondo, just south of Santa Fe, and the other at Tesuque, north of the city, are upon very ancient sites, located by walls which jut out of the debris. Pottery and other remnants of Pueblo civilization have been found, but no systematic excavations have been carried on.

MOUNDS IN THRACE.—G. Seure and A. Degrand describe certain mounds in Thrace, which differ from the ordinary *tumuli*, resembling more the Asiatic "tells." Four of the 7 known have been explored carefully, showing clearly that they were burial mounds. The bodies were burned, the ashes wrapped in layers of clay, surrounded by vases and offerings, and the whole covered with clay and burned. The mounds are formed by successive strata of these tombs. The lower strata are prehistoric, though some Roman and later graves occur near the surface.

DISCOVERY OF THE HOMERIC CITY OF ITHACA.—During his excavations at Leucas, in 1906, Professor Dörpfeld discovered a long settlement with simple walls, pottery with engraved ornamentation, and a few fragments of glazed ware. He considers this the Homeric city of Ithaca. Near by an archaic temple with old Doric columns outside and Ionic columns within, has been found. The clearing of a cave has led to the discovery of prehistoric remains, including stone implements, monochrome potsherds, such as are found in Troja II and Cnossos I, and also dull painted ware, recalling the early Italian and Thessalian pottery.

RESOLUTION TO PRESERVE THE OLD PALACE AT SANTA FE.—The Council of New Mexico has passed a resolution asking President Roosevelt to declare the Old Palace at Santa Fe a national monument, to be preserved at the expense of the nation as an archæological museum and school. The Old Palace was built in 1598, and from that time until almost the present day has been the governor's palace, whether Spaniard, Pueblo Indian, Mexican, or American. It is a long, low adobe building, facing the Plaza. In recent years part of it has been turned into a museum of American antiquities. Under the plan proposed, the custodianship would be given to the American Institute of Archæology, which proposes to establish there a school of American Archæology and an archæological library, as well as to extend the museum already there. Certainly no more fitting place could be found for such a project—a building inseparably linked with the history of that part of our country, situated in a region rich in relics of an earlier civilization.

PERFORATED KNOBS ON ROMAN LAMPS.—In an article on *Roman Lamps*, by Prof. E. W. Clark, which appeared in REC-

ORDS OF THE PAST, last year [Vol. V.], he states, on page 176, that with reference to the knobs always found on type III, he can not agree with Dressel that they were for the attachment of chains for hanging, as he had never been able to find one with perforated knobs. In a recent communication from Professor Clark he writes that last summer he continued his search along this line, and, in Florence, found a fragment of a lamp of this type, in which the knobs are perforated. He also found another specimen similarly perforated in the British Museum. In view of these discoveries, he states: "I therefore wish to modify my statement to the extent that it is evident that some of the knobs were perforated, and that such lamps could be suspended, but that in the majority of cases the knobs are unperforated, and that the further statement made in the paper remains probable."

GOLD CROWN FOUND AT ARLON, BELGIUM.—In December, 1905, while digging at but little depth, a gardener at Arlon, Belgium, came upon an isolated object which proved to be a torque, or crown, formed of a simple band of pale yellow gold, terminated at each end by a thin plate. The whole was hammered out from a single piece of metal. The relic is about 15 in. in circumference and weighs 19 grams. A similar torque, in bronze, belonging probably to the end of the bronze age, if not to the beginning of the iron age, was exhumed near Yamton, Oxfordshire, England, some years ago. Still another ornament of similar character was found at Fauvillers, Belgium, in 1878.

ROMAN POTTERY KILN IN BELGIUM.—A continuance of excavations begun at Houdeng-Gœgnies, Belgium, two years ago, has revealed the foundations of 10 buildings, evidently the outbuildings of some more important structure. The most interesting of these is the workshop of a potter. The kiln itself was found in the middle of a court, surrounded by sheds used, undoubtedly, for drying the pottery. It is well preserved, rectangular in shape and formed of tiles of burned clay, buried in a mass of clay, hardened by fire. It is composed of a furnace (*proefurnium*), air holes prolonged by tubular passages intended to carry the heat to the desired spot, and the laboratory (*solec*), or oven, in which the pottery was baked. The furnace, an arched passage about 9.8 ft. long, measures 4 1-3 ft. high and 3.6 ft. wide at the entrance. The oven is separated from the furnace by a thick mass of burned clay, perforated by the hot-air passages mentioned before. The periphery of each of these is vitrified, but that vitrification is merely the result of the fusion of the silicate of aluminum facilitated by the presence of a flux, such as the lime contained in the clay would furnish. Kilns of Roman potters have been found in Germany, England, France, and Italy, but this appears to be a unique find in Belgium. Here, as in other cases, the roof of the oven, as well as the chimney, has been entirely destroyed.

